



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Fig. 1.

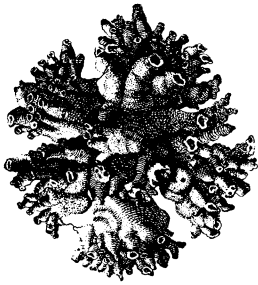
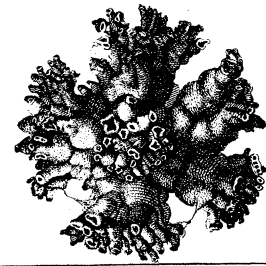


Fig. 2.

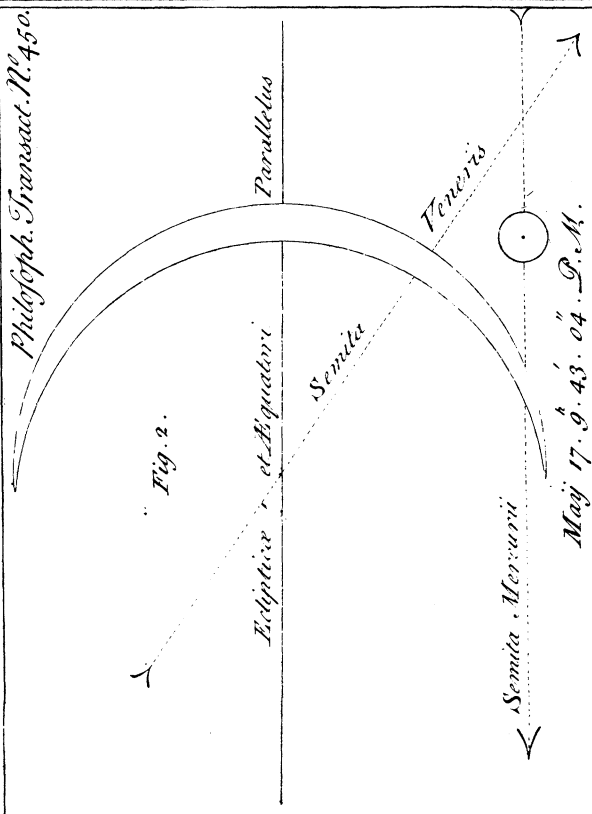


Fig. 4.

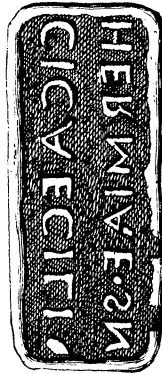
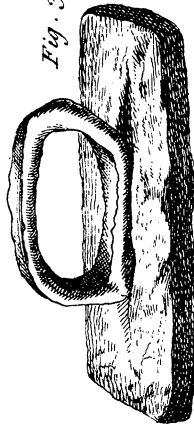



Fig. 3.



**XII. Mercurius a Venere occultatus Maii 17.**  
**1737. in Observatorio Regio Grenovici,**  
**ab J. Bevis, M. D. observatus.**

Tem. Appar. P. M.

H. M. S.

- I 37 03** **P**Ræcedens Limbus Veneris Meridianum transiit, centro a Vertice  $25^{\circ} 46' 35''$ .  
 Mercurium vero intra telescopium nequaquam conspicebam.
- 9 04 09** Centrum Mercurii Limbum Veneris præcedentem præcedebat  $12''$  Temporis.
- 06 20** Repetit. eodem tempore præcedebat, quo prius.
- 28 00** Mercurio Filum parallelum Micrometri decurrente, Cuspis Veneris austrina ab eodem Filo rescinditur,  unde Venerem Mercurium obtecturam, vel saltem stricturam colligebam; Micrometrum itaque extrahebam, quo melius instantem Contactum discernerem Tubo 24. Pedum.
- 43 04** Mercurius haud plus distat a Venere quam decima vel duodecima parte Diametri Veneris: Deinde inimicæ Nubes.
- 51 10** Venus iterum clarissime effulget, Mercurius vero totus sub Venere latet. Nubes jam Venerem rursus excipiunt, ulteriorem tam rari spectaculi contemplationem prohibentes.

*Maii*

*Maii* 18. *P. M.*

Distantia Meridiana Solis a Vertice  
30° 04'.

I 31 53 Limbus præcedens Veneris Meridian.  
transit. Centro distant a Vertice  
25° 57' 15".

Mercurium culminantem neque hac die  
videre licuit, coelo licet admodum  
fereno.

*N. B.* Distantiæ a vertice a refractioni-  
bus non purgantur.

*Vide* Fig. 2. in TAB.

XIII. *The Use of a new Azimuth Compass  
for finding the Variation of the Compass  
or Magnetic Needle at Sea, with greater  
Ease and Exactness than by any ever yet  
contriv'd for that Purpose; by Captain  
Christopher Middleton, F. R. S.*

**T**O discover the Declination of the Magnetic  
Needle, or Variation of the Compass at Sea,  
with some tolerable Degree of Certainty and Exact-  
ness, is a thing of great Use and Importance in the  
Art of Navigation.

The Instruments and Methods hitherto used for  
this Purpose, (as we could easily demonstrate, if it  
were needful) are subject to several Inconveniencies, Er-  
rors and Defects; to remedy which, this new *Azimuth*  
*Com-*